FEB 25 1974
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DEPARTMENT
OF
INDUSTRIES AND LABOUR

QUARTERLY BULLETIN

ELECTRICAL INSPECTION BRANCH

OCTOBER-1956

ISOLATING TRANSFORMER AND ELECTRIC SHAVER RECEPTACLE FOR INSTALLATION IN BATHROOMS.

Proposed requirements for a combination isolating transformer and electric shaver receptacles have now been drawn up by the Canadian Standards Association Laboratories and are acceptable as far as this Department is concerned.

This is a preliminary step towards acceptance by the Laboratories of applications for manufacturers for approval of such items. This will therefore advise that the installation of combination isolating transformer and electric shaver receptacle will be accepted in bathrooms provided that the units used carry C.S.A. Approval.

If it is desired to make provisions for the installation of these units when they become available, a raceway terminating in an outlet box for mounting the isolating transformer receptacle may be installed but the conductors must not be pulled in until such time as approved combination isolating transformers and receptacles are available.

It is believed that a 4 x 4 outlet box will provide sufficient space for mounting these units. A blank cover must be installed on the outlet box pending the installation of the transformer receptacle.

REQUIREMENTS FOR GROUNDING TYPE RECEPTACLES.

In Section 70, Interim Revisions to the Canadian Electrical Code, Rule 70.26-100 (6) indicates that receptacles installed in a location where there is more than normal risk of injury or loss of life through shock shall have an extra contact for grounding, and the receptacle and cap are to be polarized.

When receptacles are installed in an area adjacent to grounded surfaces they would fall within the above category and they should be of the type which have an extra contact for grounding. It is felt advisable to provide this type of receptacle in all such areas even though at the time of installation the necessity for grounding may not be apparent.

For 125 volt circuits the new NEMA standard type receptacle having two parallel slots and a "U" shaped grounding terminal should be used in any location adjacent to grounded surfaces. It should also be realized that where both 125 volt and 250 volt circuits are used on the same premises the receptacles used on the outlets supplied at 250 volts shall be so constructed that standard 125 volt caps cannot be inserted therein.

CONDUCTORS IN MULTIPLE

Conductors of similar conductivity in sizes of No. 1/0 B&S Gauge and larger may be run in multiple provided all of the conditions outlined in Rule 12-030 of the Canadian Electrical Code are complied with. When the use of multiple conductors is employed it is imperative the requirements of the above indicated Rule be met in order to ensure an equal division of the total current between the conductors. In instances where multiple conductors are used for services, whether separate service stacks are used or not, it is felt that additional precautions must be taken by the electrician since he may not be present when the connections are completed to the service drops and metering current transformers, if installed.

Therefore, in such cases the electrician should install conductors of the proper length so that it will not be necessary for them to be cut for termination and notify the representative of the supply authority that multiple conductors have been used.

THE WHITE OR SUPPLY AUTHORITY COPIES OF PERMITS.

We have recently received numerous enquiries from persons experiencing difficulty in obtaining a power supply connection since the electrician who installed their work neglected to leave with them the supply authority copy of the permit.

It is most important that contractors either leave the white copy of the permit with the customer or present it to the representative of the supply authority when electrical installations are completed. This is necessary since the supply authority will not make any new service connections unless they are in possession of the white copies of approved permits covering the installations concerned.

It must be emphasized that in all cases the white copy of the permit must be presented to the representative of the supply authority when the installation is completed.

ELECTRICAL INSTALLATIONS TO BE COVERED BY PERMIT

It is apparent that clarification is required regarding the necessity of covering permits for electrical distribution work installed outdoors.

Regulation 31 (a) of the permit regulations states, in part, that "it shall be unlawful for any person to construct, install, or alter any electrical work in or upon any premises until he shall have made application in writing for a permit therefore from the Electrical Inspection Branch". Permits are, therefore, required for all electrical work beyond the point where electrical energy is delivered by the supply authority. This would include overhead and underground distribution lines as well as interior wiring.

ELECTRICAL INSTALLATIONS TO BE COVERED BY PERMIT - Continued.

It should be noted that the Scope of The Canadian Electrical Code covers electrical equipment and systems at all potentials. This, of course, includes extra low voltage systems.

In view of the above the installation of extra low voltage systems should be covered by permit in the usual way. This becomes particularly important in buildings in which public safety is involved. Buildings falling within this category would include schools, hospitals, hotels, apartment houses, etc., and any building of a commercial or industrial nature.

FIREPLACE RECEPTACLES

Many installations are found where a receptacle intended for use with a fireplace is connected to a lighting branch circuit with other receptacles. The fireplace receptacle, however, is in most cases being used to supply heating equipment with a high wattage rating and should therefore be connected on a separate circuit of No. 12 conductors.

In checking these installations, the reason given for originally connecting the fireplace receptacle to a lighting branch circuit is that the intent was to use an incandescent lamp type of heating unit only. In view of the large number of installations in which the initial low-wattage type of heating device is replaced by one of a higher rating, it is considered advisable to require that any receptacle intended for use with a fireplace be connected on a separate circuit of No. 12 conductors.